

Date: Tuesday, 29/04/2008 11:22:18 AM
 User: Melanie Fauteux

Process Sheet

OK

Customer	: CC-DAR01 Dart Aerospace Ltd.		Drawing Name	: FRONT RAIL, LH		
Job Number	: 38868		Part Number	: D37661		
Estimate Number	: 10804		Drawing Number	: PROTOTYPE		
P.O. Number	:		Project Number	:		
This Issue	: 29/04/2008	S.O. No. :	Drawing Revision	: A.04.30		
Prsht Rev.	: NC		Material	:		
First Issue	: 29/04/2008	Type	R & D SM/MED FAB	Due Date	: 16/05/2008	Qty: 1 Um: Each
Previous Run	: 38866					
Written By	:					
Checked & Approved By	:					
Comment	:					

Additional Product

PROTOTYPE

Job Number:



Seq. #:	Machine Or Operation:	Description :	
1.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1	
Comment: SMALL & MEDIUM FAB RESOURCE 1			
MAKE PER DRWG D3766 REV A FF 08-05-15			
2.0	M304TR1000W155	304 RD Tube 1.0" x .155W 304 RD TUBE 1.0" x .188W UP 08.04.30	
Comment: Qty.: 2.9300 (s)/Unit Total : 2.9300 (s) FF 08-05-15			
3.0	QC5	INSPECT WORK TO CURRENT STEP ENGINEERING APPROVAL Sodostis 08.05.21	
Comment: INSPECT WORK TO CURRENT STEP FF 08-05-15			
4.0	PACKAGING 1	PACKAGING RESOURCE #1	
Comment: PACKAGING RESOURCE #1 FF 08-05-21			
GIVE TO CHRIS P-ENG FOR ENGINEERING USE ONLY RE 08.05.29			
CHARGE TO JOB #00196			
5.0	QC21	FINAL INSPECTION/W/O RELEASE	
Comment: FINAL INSPECTION/W/O RELEASE 1A 08.05.29 Prototype			
Job Completion W. D8/06/11			

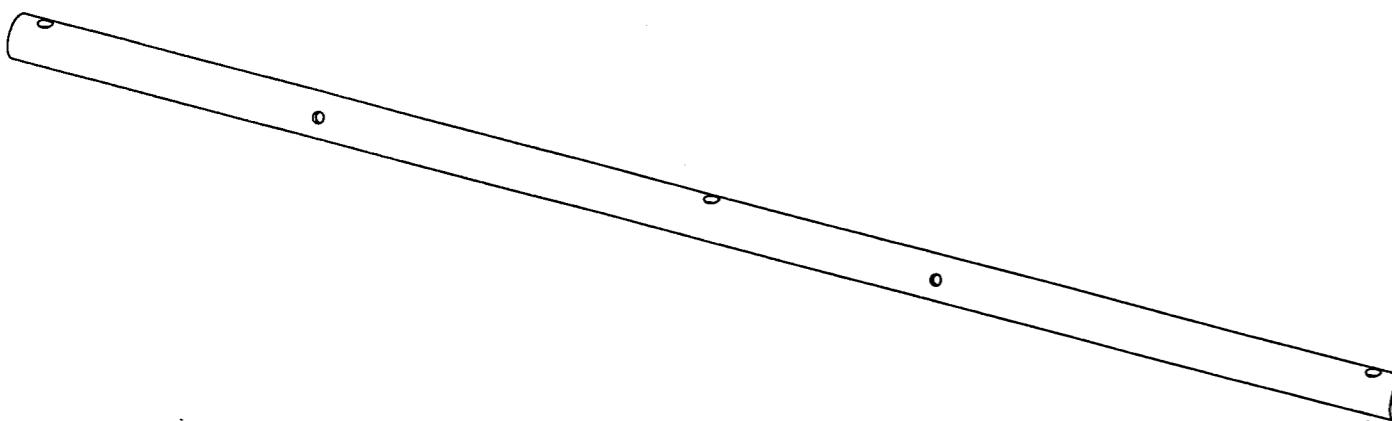
8

7

6

5

D

D3766-1 FRONT RAIL, LH

8

7

6

5

NOTES:

1) MATERIAL: AISI 304/316 SS TUBING 1.00" OD X 0.125" WALL (REF. DART SPEC. M304TR1.000W/155)
 2) FINISH: NONE
 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 6) IDENTIFICATION: N/A
 7) WEIGHT: D3766-1, 3.85 lbs
 D3766-2, 3.85 lbs
 D3766-3, 3.84 lbs

0.125

1.00

P
68.04.23D3766-3 RE/

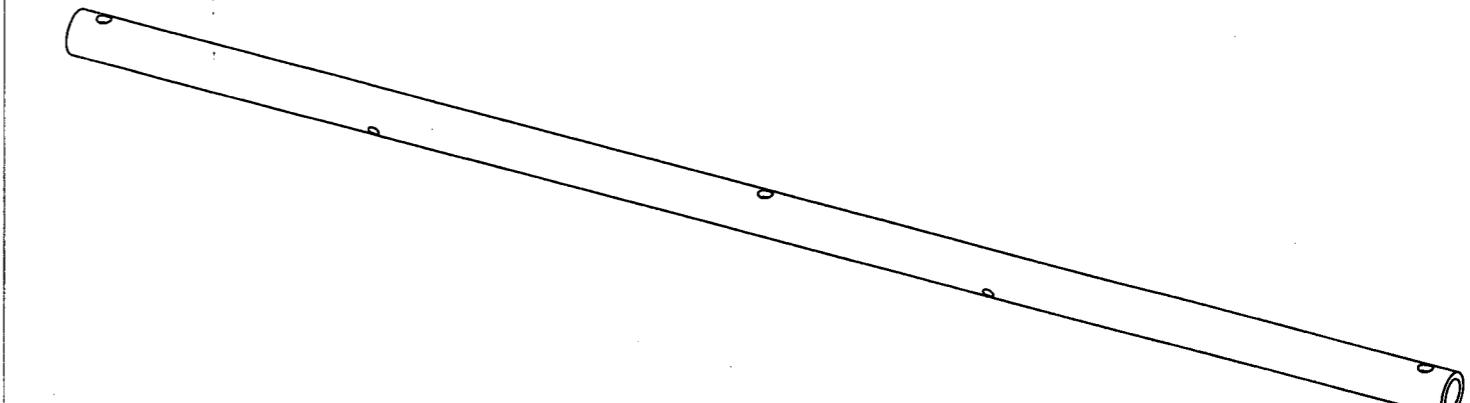
4

3

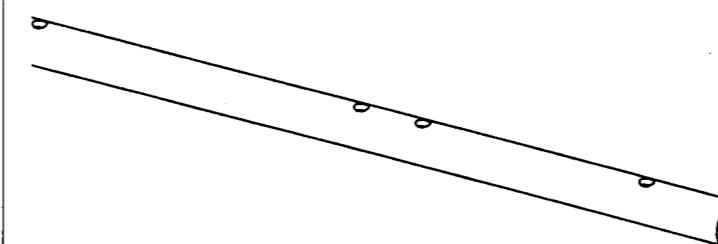
2

1

D



D3766-2

D3766-1 FRONT RAIL, RHREAR RAIL

4

3

2

1

B

B

PROTOTYPE
 PLEASE RETURN ALL ISSUED
 DATA TO ENGINEERING
 CP 08.04.23

REV.	DESCRIPTION		BY	DATE
DESIGN	HS	DART AEROSPACE LTD		
DRAWN	HS	HAWKESBURY, ONTARIO, CANADA		
CHECKED		DRAWING NO.	REV. A	
MFG. APPR.		D3766	SHEET 1 OF 4	
APPROVED		TITLE	SCALE	
DE APPR.		RAIL	NTS	
DATE	08.03.25		COPYRIGHT © 2008 BY DART AEROSPACE LTD	
	THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

8 7 6 5 4 3 2 1

D

D

C

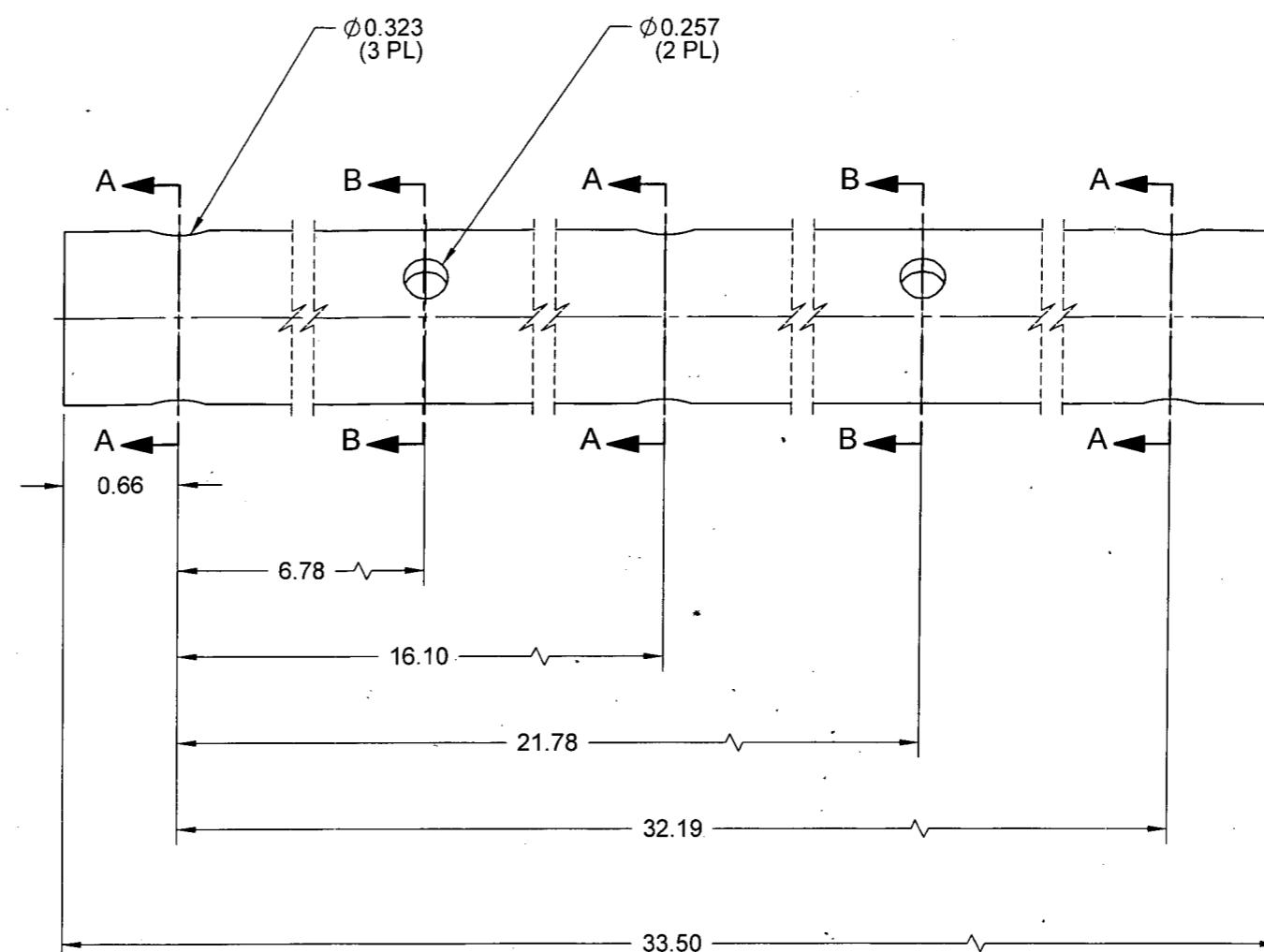
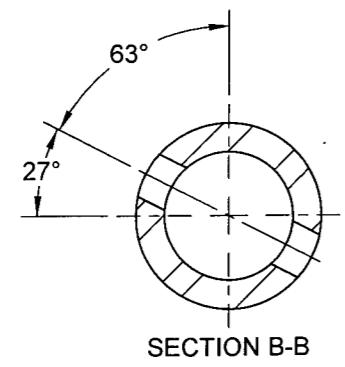
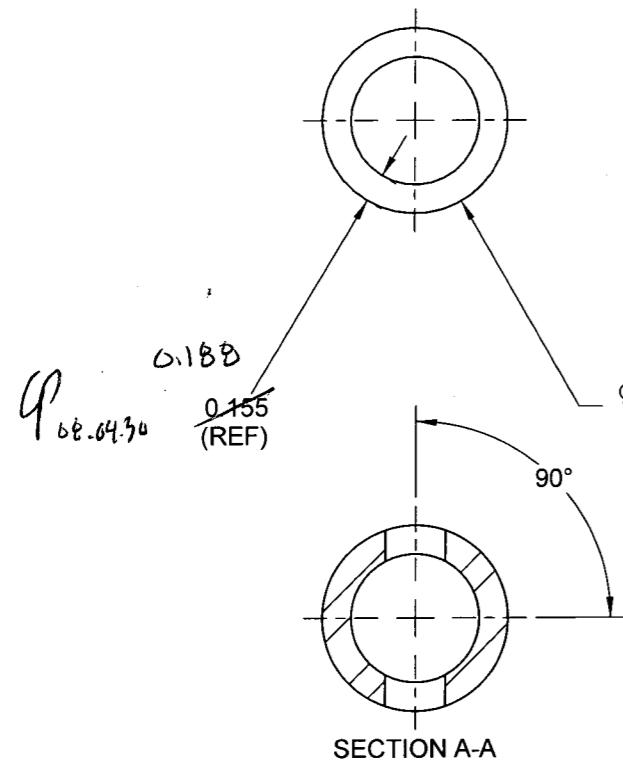
C

B

B

A

A



D3766-1 FRONT RAIL, LH

PROTOTYPE
PLEASE RETURN ALL ISSUED
DATA TO ENGINEERING
YD 08.04.23

DESIGN	HS	DART AEROSPACE LTD	
DRAWN	HS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	
MFG. APPR.		REV. A	
APPROVED		D3766	
DE APPR.		SHEET 2 OF 4	
DATE	08.03.25	TITLE	RAIL
		SCALE	1:1
COPRIGHT © 2008 BY DART AEROSPACE LTD		THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8

7

6

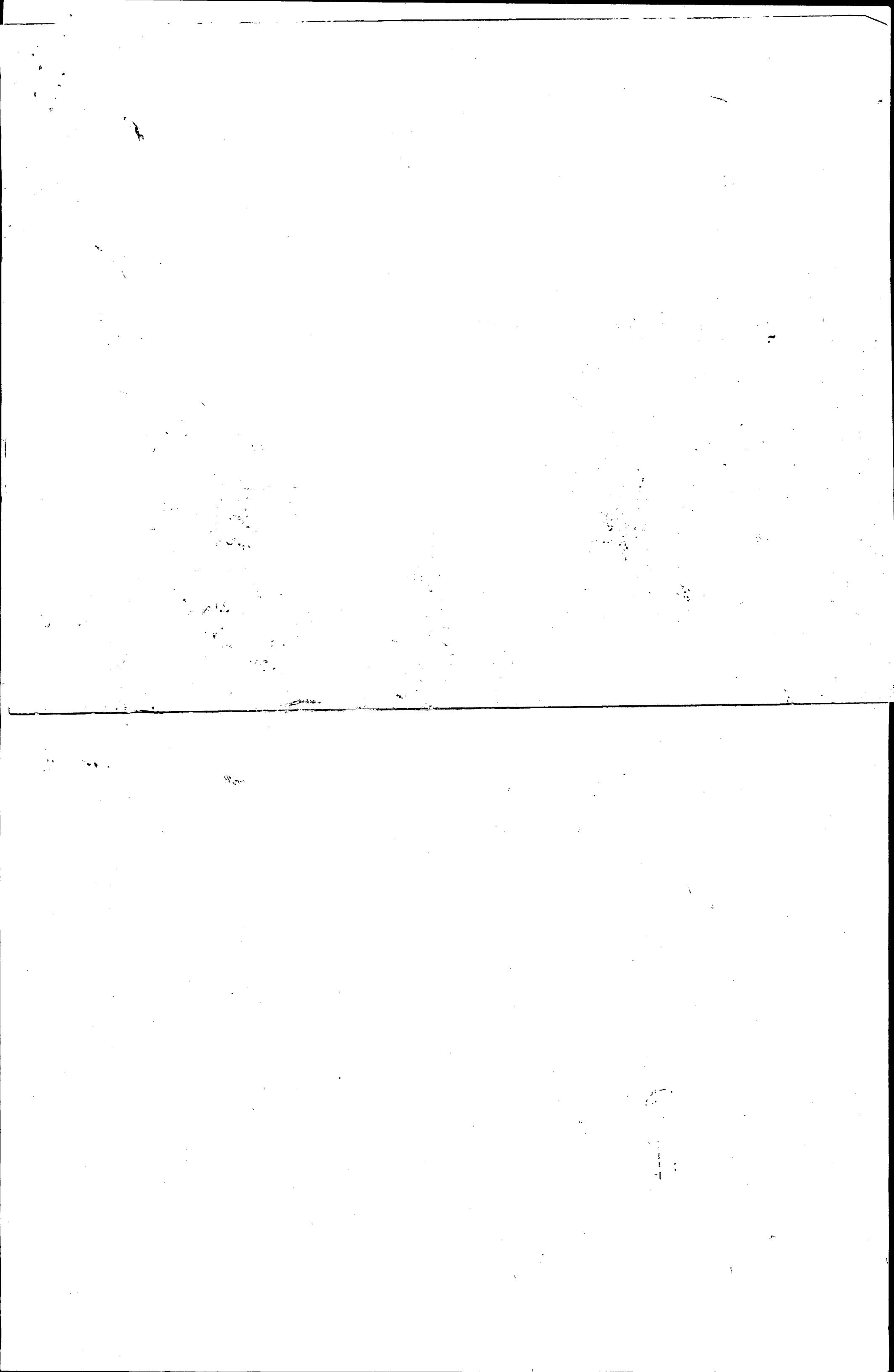
5

4

3

2

1



Receiving Report

Date: 8/5/08Batch No: 3107952Supplier: MAGNADart P/O: 6270

Packing Slip: Yes No
 Invoice: Yes No
 Receipt: Cash Cr

Release Note Attached: Yes No N/A
 Waybill Attached: Yes No N/A
 Shipment Complete: Yes No N/A
 QC6 Inspection do not lot N/A
 Work Order do not lot N/A

Discrepancies

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments

Initials of receiver (if shipment OK) Level 12 JK

Production/Admin:

Date 08/05/08

Location _____

Received/Costing RCP 7826Initial CK

H:\FORMS\Purchasing\approved purch\RECREPORT Rev D

Heat # 168712-3

RECEIVED MAY 13 2008

Sub-Total
G.S.T.

1090.00
54.50

TOTAL ➔

1144.50

FRAIS D'ADMINISTRATION DE 1½% PAR MOIS (18% PAR ANNÉE) SUR COMPTE PASSÉ Dû.
 LE PRÉSENT CONTRAT SERA RÉGI PAR LES LOIS DE LA PROVINCE DE QUÉBEC ET COMME
 AYANT PRIS NAissance DANS LE DISTRICT JUDICIAIRE DE MONTREAL.
 ADMINISTRATION CHARGES OF 1½% PER MONTH (18% PER YEAR) ON OVERDUE ACCOUNTS.
 THE PRESENT AGREEMENT SHOULD BE GOVERNED BY THE QUEBEC LEGISLATION AND SHOULD
 BE CONSIDERED AS HAVING ORIGINATED IN THE JUDICIAL DISTRICT OF MONTREAL.

C G 826

6270



Shanghai Huaerde Stainless Steel Pipe Manufacture Co., Ltd. A PED& AD-W2 Certified Company
 Chihua Road, Shanghai Chemical Industry Park(Section B)
 Fengxian District, Shanghai.201417 China

Mill Test Report

HED39569-04

According to EN10204 - 3.1



Certificate No. 01200000000000000000

Customer Name									Material Specification	ASTM A/SA-213 A269 NACE MR0175 TP316/316L OD 220 GRIT POLISHING			
Purchase Order No.	39569								Heat Treatment	Solution Annealed in the temperature of 1040°C for 20 minutes and Quenched by water			
Description	Cold Finished Seamless Austenitic Stainless Steel Tubes								Heat No.	8-109			

ELEMENTS	C %	Mn %	P %	S %	Si %	Cr %	Ni %	Mo %		Lot No.	Yield Strength	Tensile Strength	Elongation	Hardness HRB
SPECIFICATION	Max 0.035	Max 2.00	Max 0.045	Max 0.030	Max 1.00	16.0 ~18.0	10.0 ~14.0	2.0 ~3.0		8-109	Min.205MPa	Min.515 MPa	Min.35%	Max.90
RESULTS(LADLE)	0.018	1.34	0.005	0.024	0.40	16.40	10.14	2.13		07-10-15-88-1	245	539	46%	77
RESULTS(PRODUCT)	0.020	1.25	0.005	0.013	0.51	16.47	10.13	2.17		07-10-15-88-2	247	543	48%	81

C) Extend of material delivery

Item No.	Quantity	Descriptions	Heat No.	Lot No.	Testing Item	Details	Results
1	1120 ft	1" x .049" x 20'	8-109	07-10-15-88	Dimensional / Visual	ASTM A999	Satisfactory
2	1880 ft	1" x .065" x 20'	8-109	07-10-15-88	Hydrostatic Pressure test	ASTM A999	Satisfactory
3	520 ft	1" x .188" x 20'	8-109	07-10-15-88	Flattening Test	ASTM A1016	Satisfactory
4	500 ft	35mm x 2.5mm x 20'	8-109	07-10-15-88	Flaring Test	ASTM A1016	Satisfactory
					Inter-granular Corrosion test	ASTM A262 E	Satisfactory

E) Steel Making Process**Electrical Furnace****F) Statement**

- No weld repair performed for billet and pipe
- The Materials have been manufactured ,tested and examined in acc. with all the requirements of the ordered standards and we confirm that all test results are acceptable

Date	November 24, 2007	Mill Inspector	Li Bin	Approved by QC manager	
------	-------------------	----------------	--------	------------------------	--

